CALIFORNIA SOLAR ENERGY INDUSTRIES ASSOCIATION
916-747-6987 info@calseia.org
P.O. Box 782, Rio Vista, CA 94571

August 10, 2009

Julie Fitch, Director
Energy Division
California Public Utilities Commission
505 Van Ness Avenue, Room 4004
San Francisco, CA 94102

Re: Advice 2364-E: Request for Approval of Competitive Solicitation Process and Criteria for 250 Megawatts of Southern California Edison's Solar Photovoltaic Program and Draft Standard Power Purchase Agreement

Dear Ms. Fitch:

The California Solar Energy Industries Association (CALSEIA) offers comments on the advice letter filing of Southern California Edison Company (SCE) regarding the process and criteria for evaluation of offers received pursuant to competitive solicitations for 250 MW of third party owned solar photovoltaic projects and the associated standard 20 year Power Purchase Agreement (PPA) for accepted offers. CALSEIA welcomes the opportunity to work with SCE and other interested stakeholders to craft a process which will serve to create a competitive market of commercially viable and cost effective distributed photovoltaic projects.

CALSEIA has worked with the Solar Alliance and concurs with their suggested modifications to the proposed standard power purchase agreement. However, CALSEIA has additional concerns and recommendations that we urge the Commission to address before approving SCE's Advice Letter.

1. Request for Offers is a Reverse Auction Process

SCE proposes to use a 'reverse auction' process to take bids for projects under the program. Unfortunately, there has been no discussion of any other process that may have been considered and why the specific reverse auction approach has been selected over the alternatives. Lacking a public record to understand how and why a reverse auction was chosen over alternatives it is difficult to know SCE's objectives in using this process. The assumed purpose of the reverse auction would be to award contracts to the developers who offer the lowest cost per kilowatt-hour (kWh). However, SCE did not provide any information on what its assumed it would save through a reverse auction, so it is not clear what objectives were contemplated or how to measure success.

Moreover, the Commission has ruled previously against reverse auctions[1] for utility construction projects and stated that:

[1] Decision 04-12-056 December 16, 2004

> "…we are convinced that reverse auctions may not satisfy the utilities' and our own objectives to keep costs down while promoting quality, safety and fair construction practices. On the issue of costs, reverse auctions may not consistently result in lower prices than sealed bids. Reverse auctions permit bidders to start the bidding high in order to maximize the opportunity for profits. They need only reduce their bids in response to the bids of others. The potential for a utility accepting an artificially high bid in a reverse auction would be especially pronounced where a market for labor, services or supplies is not highly competitive. The prospect of such a circumstance would be higher for construction projects than, for example, in a solicitation for building maintenance. We would also expect limited price competition where a construction project has very specialized elements, for example, using new techniques or technologies."

In D.04-12-056 the Commission found that:

> "1. Reverse auctions may not result in the lowest cost construction contracts, especially in cases where market competition is limited and where projects are complex and have specialized techniques or technologies.
> 2. Reverse auctions may motivate bidders to emphasize project price over other essential project elements, such as safety or quality of workmanship.
> 3. Ratepayers are likely to benefit from a prohibition on reverse auctions."

If reverse auctions are not allowed for utility construction projects it is difficult to understand why they would be preferred for acquiring power from distributed photovoltaic generation.

Specific to solar procurement, a recent study by the Solar Electric Power Association (SEPA) issued a report titled Utility Procurement Study: Solar Electricity in the Utility Market[2] states that:

> "In today's electricity market, only a small percentage of utility procurement takes place via online auction. However when utilities have pursued this route there has been some evidence of both success and lack of success in reducing energy prices.
>
> While to date there has been little documentation, if any, of large scale utility solar procurement, given the potential benefits offered by online procurement techniques, this is likely a procurement strategy that interested electric service providers should continue to investigate further."

The proposed reverse auction approach is even more difficult because there is nothing to which it may be compared – the SCE proposal will be the first of its kind. It is important to note that the only successful distributed generation programs on the wholesale side of the meter are feed in tariff programs in place throughout Europe and in Gainesville, Florida.[3]

---

[2] http://www.solarelectricpower.org/docs/Procurement%20Report%20FINAL%20-%2012-16-08.pdf

[3] The California Solar Initiative is a successful program to deploy distributed PV that serves **on-site demand** on the **retail side** of the customer meter. The distributed generation program proposed by SCE is on the wholesale side of the meter and all electricity generated is delivered directly to the utility.

In addition to the difficultly in understanding the objective of a reverse auction in SCE's Solar PV Program, CALSEIA has identified additional concerns that may undermine the success of the program if it is implemented as currently proposed:

- Bidder Transaction Costs. The California Energy Commission has identified transaction costs for small generators as a barrier to participation in the current Renewable Portfolio Standard Solicitations[4] and the proposed design of the SCE PV Program solicitation mirrors the RPS solicitation procedure. Thus, it should be no surprise that small generators will have challenges in participating in the SCE PV Program process. Similar to the RPS, project developers who have a potential site will need to expend resources to prepare a bid. Those expenses include contracts with the site owner, contracts with project installation contractor(s), interconnection assessments, product procurement, and financing. It is important to note that the project viability calculator includes a ranking based on site control. In order to achieve site control a potential bidder must negotiate and secure a roof lease prior to knowing the outcome of the bid. The inherent risk in losing a bid and the up-front investment will reduce the number of potential project bids.

- Market Power. CALSEIA is concerned that the transaction cost barriers to participation will result in a concentration of market power within the solar photovoltaic industry. A competitive market within the distributed photovoltaic market segment is key to driving down project costs. A PV procurement program that has high transaction costs will foster opportunities for larger companies and shut out opportunities for new market entrants.

- Custom nature of projects – solar procurement is not homogeneous. As one would expect in a rooftop program, there are specific conditions that a project developer must address in order to submit a bid, not the least of which is the total area of roof available that is in sound condition with adequate solar access. The photovoltaic module layout for EVERY project will be custom designed – every site will have unique site conditions. Breaking this down for illustration purposes, the successful bidders will have secured roof spaces that are between 4 and 16 acres (1 MW of photovoltaic modules requires 4 to 8 acres) that are conveniently located near a point of interconnection that does not require extensive/expensive upgrades. Development prices will vary based on a range of costs related to the specific site conditions. If the price were based on the non-site specific elements, a reverse auction might be workable. However, due to the extensive variations in site specific conditions, a reverse auction may preclude a highly desirable site (due to its proximity to load centers) from winning a bid because its costs are slightly higher than a less desirable site that has lower costs. The custom nature of distributed solar projects does not fit within the type of reverse auction proposed by SCE. Projects of higher value because they are closer to demand centers or optimal with respect to lowering peak demand for electricity need consideration so that projects of higher value are not bypassed in favor of projects of lesser value.

- Potential for Underbidding. CALSEIA is concerned that there is a potential for underbidding that will result in contract awards for projects that cannot be built.

[4] http://www.energy.ca.gov/2008publications/CEC-300-2008-009/CEC-300-2008-009-F.PDF

Underbidding may occur because there is so much uncertainty in the likelihood of actually winning a bid that rough estimates of costs may turn out to be lower than actual costs. Another possible reason for underbidding is to allow opportunities for project developers to announce awards to attract investors. In the 1990s this practice was dubbed 'vaporware' to describe an announcement used to create hype regarding product that may or may not materialize. For these reasons, bidders may have an incentive for deliberately 'low ball' a bid. For ratepayers and the utilities, there is risk that these projects cannot be built at the price originally bid. Failed projects also undermine the public reputation of the solar industry.

- Lengthy process. CALSEIA is concerned that the reverse auction approach outlined by SCE will result in a lengthy process that will add further delays to the moving projects forward. Specifically, the SCE process outlines a 5 month process from the date of program launch to the date when SCE will file for approval to award contracts. For reference, solar industry experts estimate a 1MW solar project can be built in 30 days (excluding contract negotiation, permitting, and interconnection). If a reasonable fixed price approach could be implemented, the transaction cost savings for ratepayers and developers would be significant. One way to approach setting a fixed price contract for the program would be to establish an average price from the bids received for the first solicitation (excluding the high and low outliers). This approach would help to move projects from concept to generation faster than the timeline anticipated by SCE.

CALSEIA agrees that finding the right price presents a challenge in this program in that information on pricing for photovoltaic installations is limited and inadequate and there is inherent risk in setting the price too low or too high. Too low will leave this untapped market untouched and too high will create unfair ratepayer burdens.

CALSEIA strongly encourages SCE and the Commission to implement a fixed price contract rather than a reverse auction for the reasons discussed below. CALSEIA recommends consideration of alternatives to the reverse auction process proposed by SCE, specifically:

- To address bidder transaction costs: After the initial RFO, SCE should establish and publish a fixed price for future contracts based on the median price (excluding outliers) of bids received in the initial Request for Offers.
- To address Market Power: Reject solicitations that receive fewer than ten unrelated bidders and limit any single bidder (and its subsidiaries) to no more than 25% of bids awarded per solicitation.
- Custom nature of Projects: revise the Project Viability Calculator to capture the added value of locating sites close to demand centers or have peak demand congestion benefits on a specific distribution line.

2. Project Viability Calculator. CALSEIA provides the following suggested revisions to the current project viability calculator available on-line at the Commission website[5] so that it may be used effectively within the SCE Solar PV Program:

[5] http://www.cpuc.ca.gov/PUC/energy/Renewables/hot/Project+Viability.htm

- Project Development Experience: the 10-point score should be revised as follows: "The company and/or the development team has completed 2 or more projects of similar technology and *cumulative* capacity (e.g., ~~20~~ *1* MW photovoltaic facility (~~thin-film~~))" to encourage developers, who may not have installed a single large project but have extensive experience, to participate.
- Remove reference to a specific technology type, i.e., 'thin film' and modify all references to 20 MW or larger projects to instead refer to "projects between 1 and 2 MW" so that the scoring is relevant to the types of projects under consideration in the SCE Solar PV Program.
- Site Control: Revise to state that Project has conditional site control to allow leasing arrangements to be made contingent on winning a bid. This will help reduce up-front transaction costs to the potential bidders.
- Permitting Status: Permitting status should not be scored at all in the SCE PV Program. Smaller projects typically obtain ministerial building permits instead of Conditional Use Permits. Applications for Certification are never used on smaller projects. Bidders will be at risk of losing substantial investment in permit fees and engineering studies.
- Interconnection Progress: Should be revised to include reference to the Small Generator Interconnection Process and/or the WDAT process.
- Value for Other Attributes. New scoring criteria should be added to the Project Viability Calculator to capture the added value of locating sites close to demand centers or have peak demand congestion benefits on a specific distribution line, and provide emission reduction benefits within the local air district. CALSEIA recommends a score of 10 points for projects that are located close to demand centers, have peak demand congestion benefits, and provide reduced emission benefits.
- Use of Local Businesses. New scoring criteria should be added to the Project Viability Calculator to capture the developers proposed use of local businesses. This will provide an incentive for creating jobs within the community where the project will be built.

3. Additional Issues

CALSEIA provides comments on these specific items within the terms and conditions of the Power Purchase Agreement:

- C-10 Licensing Requirement. CALSEIA believes that the wording of this requirement might have been in error and suggests the following revision to ensure that licensed electrical contractors are used and that certified electricians are used by the licensed contractors.

  7.17 To require that all ~~Electricians~~ Electrical Contractors employed or otherwise utilized *to perform electrical work* be licensed as class C-10 electrical contractors under California's Contractors' State License Board Rules and Regulations, and *workers used to perform electrical work* be ~~qualified~~ *certified* to *perform electrical* work under California Labor Code Section 3099 *et seq.;*

In addition, the current wording omits reference to other construction trades that might be utilized by a project developer, such as a General Contractor or General Engineering Contractor. CALSEIA suggests insert a new subparagraph to allow developers to utilize properly licensed contractors:

"To require that all contractors and subcontractors employed or otherwise utilized be licensed by the California Contractors' State License Board rules and regulations."

- Aggregation of rooftops. CALSEIA suggests aggregation be allowed to aggregate several rooftops (provided all of the rooftops are on the same p-node) to form an individual project. For instance, a project host may own or control a collection of buildings on the same p-node, as in the case of certain business parks, schools, or local governments. The individual rooftops in the area may not be able to accommodate a 1MW system, but in aggregate, they could host a 1-2MW system.

4. Conclusion and Summary

CALSEIA appreciates the opportunity to provide these comments. In summary, CALSEIA recommends that:

- SCE make public its goals and assumptions, and alternatives considered to the reverse auction approach proposed in the SCE PV Program, and address the applicability of the Commission's prohibition on use of reverse auctions.
- Specific to the bidding process proposed by SCE:
    a. After the initial RFO, SCE establish and publish a fixed price for future contracts based on the median price (excluding outliers) of bids received in the initial Request for Offers.
    b. Reject solicitations that receive fewer than ten unrelated bidders and limit any single bidder (and its subsidiaries) to no more than 25% of bids awarded per solicitation.
    c. Revise the Project Viability Calculator to capture the added value of locating sites close to demand centers or have peak demand congestion benefits on a specific distribution line.
- Revisions to the Project Viability Calculator:
    a. Project Development Experience: the 10-point score should be revised as follows: "The company and/or the development team has completed 2 or more projects of similar technology and *cumulative* capacity (e.g., ~~20~~ *1* MW photovoltaic facility (~~thin-film~~))" to encourage developers, who may not have installed a single large project but have extensive experience, to participate.
    b. Remove reference to a specific technology type, i.e., 'thin film' and modify all reference to 20 MW or larger projects to instead refer to "projects between 1 and 2 MW" so that the scoring is relevant to the types of projects under consideration in the SCE Solar PV Program.
    c. Site Control: Revise to state that Project has conditional site control to allow leasing arrangements to be made contingent on winning a bid. This will help reduce up-front transaction costs to the potential bidders.

d. Permitting Status: Permitting status should not be scored at all in the SCE PV Program. Smaller projects typically obtain ministerial building permits instead of Conditional Use Permits. Applications for Certification are never used on smaller projects. Bidders will be at risk of losing substantial investment in permit fees and engineering studies.
e. Interconnection Progress: Should be revised to include reference to the Small Generator Interconnection Process and/or the WDAT process.
f. Value for Other Attributes. New scoring criteria should be added to the Project Viability Calculator to capture the added value of locating sites close to demand centers or have peak demand congestion benefits on a specific distribution line, and provide emission reduction benefits within the local air district. CALSEIA recommends a score of 10 points for projects that are located close to demand centers, have peak demand congestion benefits, and provide reduced emission benefits.
g. Use of Local Businesses. New scoring criteria should be added to the Project Viability Calculator to capture the developers proposed use of local businesses. This will provide an incentive for creating jobs within the community where the project will be built.

- Clarification of C-10 Electrical Contractor Licensing and certified electrician requirements and allowing use of General or other properly licensed construction trades.
- Allow aggregation of projects.

Thank you in advance for your consideration. CALSEIA looks forward to working with SCE to create a competitive market of commercially viable and cost effective distributed photovoltaic projects.

Sincerely,

Sue Kateley
Executive Director

cc: Mr. Honesto Gatchalian, CPUC, Energy Division (via U.S. Mail and email)
Ms. Maria Salinas, CPUC, Energy Division (via U.S. Mail and email)
Mr. Akbar Jazayeri, SCE (via U.S. Mail and email)
Mr. Bruce Foster, SCE (via U.S. Mail and email)
A.08-03-015 Service List